

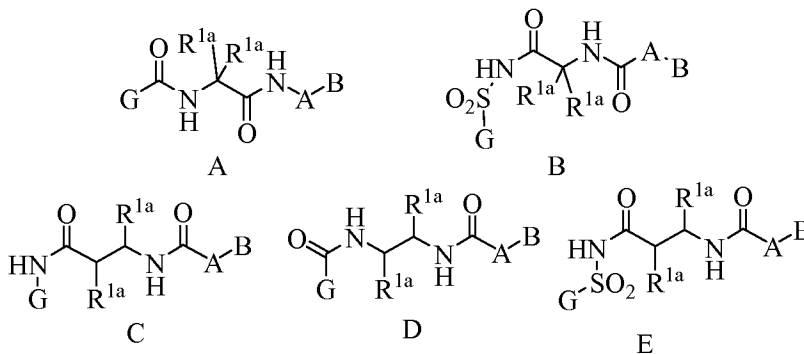
REMARKS

Status

Claims 1-22 are pending in this application, with Claims 11-14 being withdrawn from consideration.

Discussion

Applicants' representative, David H. Vance, Ph.D., J.D., thanks Examiner Balls for the helpful and courteous discussion of 11 August 2006. During the discussion it was noted that Applicants felt that the search was improper and that Applicants could not understand why previously allowable subject matter was no longer allowable. The details of the discussion are discussed below.



With respect to the Election/Restriction requirement, Applicants submit that the search and resulting restriction are highly improper. The following is list of what has occurred in the 28 November 2005 Office Action, the 23 January 2006 Amendment, and the pending 20 July 2006 Office Action.

- (a) The 23 January 2006 amendment limited the presently claimed invention to structures A-E shown above.

- (b) The elected species corresponds to structure D, wherein each R^{1a} is H, A=phenyl, B=2-oxo-pyridyl, and G=5-chloro-thien-2-yl.
- (c) The 28 November 2005 Office Action stated that ALL of Claims 7 and 8 were searched. Compounds A-E above correspond to the cores of Claim 7, except for the absence of a urea core.
- (d) Claim 8 was indicated to be allowable in the 28 November 2005 Office Action.
- (e) Claim 9, to the extent it read on Claims 7-8 was also stated to be free of the prior art. The 23 January 2006 amendment limited Claim 9 to structures A-E (i.e., limited to the scope of Claims 7-8).
- (f) The current Office Action now states:
 - a. Structures A-E are not members of a “true” genus as they don’t share a substantial structural feature.
 - b. Of structures A-E, now only D has been searched.
 - c. Claims 8-9, which were in allowable condition, are objected to under 37 C.F.R. §1.75(a) for failing to limit the subject matter of a previous claim. They are alleged to list species outside of the newly examined genus (even though Claim 8 had already been examined and allowed in the 28 November 2005 Action).
 - d. The search was extended from structure D to the non-claimed ureas/carbamates of Dorsch et al (WO 2002/48099)(“Dorsch”) and then concluded.

Applicants are unaware of any search parameters in the MPEP instructing an examiner to search an elected species, find no art, then extend the search to compounds OUTSIDE of the claimed scope. Applicants note that if the searched referenced in the 20 July 06 Office Action is actually referring to the search performed for the 28 November 2005 Office Action, then Applicants respectfully request that the subject matter indicated to be allowable in the 28 November 2005 Office Action should still be allowable (i.e., Claims 8-9 and logically Compounds A-E). If this subject matter is no longer allowable, then a new search must have been performed. This search cannot have found the Dorsch subject matter as it is outside of the invention claimed in the 23 January 2006 Amendment.

Furthermore, Applicants contend that it is rather disingenuous of the USPTO to say that structures A, B, C, and E do not share a substantial structural feature that is essential to their factor Xa inhibitory utility (as required by In re Harnisch cited in the 20 July 2006 Office Action). The structural differences between D and A, B, C, and E are at most one or two atoms. These differences are described below.

- I. Structure A differs from D by the absence of a methylene group (CHR^{1a}). The entire structure is the same except for one methylene.
- II. Structure B differs from D by the absence of a methylene and the addition of a SO_2 group. Structure B still has the same length linear core (6 atoms).
- III. Structure C differs from D by the reversal of an amide linkage. The linear core of C has exactly the same formula, it is just that G is attached via an NHC(O) instead of a C(O)NH .
- IV. Structure E differs from D by the addition of a SO_2 group. This entire structure is the same, except for one SO_2 group.

Applicants contend that the noted differences between the elected structure D and structures A, B, C, and E are very small. If the USPTO has expanded their search to include Dorsch, which requires the addition of an NH or O to the elected structure D, it is rather clear that the USPTO is of the opinion that a one unit or group difference does not distinguish between common and different cores.

In view of the above, Applicants submit that either the search is improper and should be conducted within the scope of the present claims or the subject matter indicated to be allowable in the 28 November 2005 Office Action should remain allowable (i.e., at least Claims 8-9). Finally, at the very least, structures A (one methylene difference) and C (amide bond reversed) should be included in the new search.

The objection to Claims 8-9 under 37 C.F.R. §1.75(c) for being improperly dependent for failing to further limit the subject matter of a previous claim is respectfully traversed.

Claims 8-9 do substantially limit the claims from which they depend, Claims 7 and 1, respectfully. Claims 8-9 recite specific species that are inside of Claims 7 and 1 respectively, but are not specifically recited in Claims 7 and 1. That Claims 8-9 contain subject matter that allegedly has not been searched does not in any way related to whether or not they are properly dependent.

The objection to Claim 1 for the extraneous word “of” has been obviated by appropriate amendment.

The extraneous “of” has been removed from the preamble of Claim 1. Withdrawal of this rejection is respectfully requested.

The rejection of Claims 1-7 and 15-20 under 35 U.S.C. §112, 2nd paragraph, has been obviated by appropriate amendment.

The reference to “Z” in the definition of variable B has been deleted. Withdrawal of this rejection is respectfully requested.

The rejection of Claims 1-10 and 15-20 under 35 U.S.C. §112, 1st paragraph, has been obviated by appropriate amendment.

The USPTO has rejected Claims 1-10 and 15-20 due to the presence of bicyclic B groups (e.g., bicyclic lactams) in the claims, but the absence of specific examples of these functional groups. Applicants do not agree that the cited reference, Ishigaki et al, which shows integrin $\alpha 4$ inhibitors with bicyclic lactams, has any bearing on the enablement of the presently claimed invention. There still is no reason to doubt that when B, in the present claims, is a bicyclic group the resulting compound would be a factor Xa inhibitor. For example, there is no reason whatsoever that a compound couldn't be a Xa inhibitor and an integrin $\alpha 4$ inhibitor. However, in order to expedite prosecution, Applicants have deleted the bicyclic option for variable B in the claims (specifically Claims 1-4). Withdrawal of this rejection is, therefore, respectfully requested.

With respect to withdrawn Claims 11-14, Applicants respectfully request rejoinder of Claims 11-14, if allowable subject matter is found in Claims 1-10.

In view of the foregoing, Applicants submit that the application is now in condition for allowance. Early notification of such action is earnestly solicited. If the Examiner has any questions or believes further discussion will aid examination and advance prosecution of the application, a telephone call to the undersigned is invited.

Respectfully submitted,

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